

A battery according to claim 62 or 63 wherein one of the end of the conductive layer is in electrical contact with one electrode of the battery and the other end forms a tab that extends above or below one of the edges of the label sufficiently to engage the other battery electrode through an accessory electrical conductor thereby forming an electrical switch.

A battery according to claim 62 or 63 wherein the insulating means is formed by inserting a temperature insulating material between the battery surface and the conductive layer.

REMARKS

Concurrently filed with this Amendment and Request for Declaration of Interference is an Amendment and Petition to Delete Originally Named Persons Jean W. Bailey and Harry R. Huhndorff as inventors in the present application. These individuals are not inventors of the invention now being claimed in claims 1-35 and 46-70. Applicant requests that claims 36-42 for which the inventor Jean W. Bailey made a contribution be deleted without prejudice from the present application.

Claims 54-70 are copied from U.S. Patent 5,059,895, granted October 22, 1991, to Cataldi et al. Claim 54 corresponds to claim 11 of the '895 patent; claim 55 corresponds to claim 12 of the '895 patent;

claim 56 corresponds to claim 13 of the '895 patent;
claim 57 corresponds to claim 14 of the '895 patent;
claim 58 corresponds to claim 15 of the '895 patent;
claim 59 corresponds to claim 16 of the '895 patent;
claim 60 corresponds to claim 17 of the '895 patent;
claim 61 corresponds to claim 18 of the '895 patent;
claim 62 corresponds to claim 20 of the '895 patent;
claim 63 corresponds to claim 21 of the '895 patent;
claim 64 corresponds to claim 22 of the '895 patent;
claim 65 corresponds to claim 23 of the '895 patent;
claim 66 corresponds to claim 24 of the '895 patent;
claim 67 corresponds to claim 25 of the '895 patent;
claim 68 corresponds to claim 26 of the '895 patent;
claim 69 corresponds to claim 27 of the '895 patent; and
claim 70 corresponds to claim 28 of the '895 patent.

In accordance with 37 C.F.R. § 1.607, the copied claims may be specifically applied to Applicant's disclosure as follows:

Copied Claims

Applicant's Disclosure

-54-

A label comprising
an integral battery voltmeter
having:

A) a dielectric layer;

p. 2, lines 9-10; p. 7,
lines 1-24; p. 12, line
15, to p. 13, line 21

p. 12, lines 15-23;
p. 13, lines 3-4; p. 14,
lines 11-18; p. 15, lines
9-14, Fig. 1A, insulative
layer 5

Copied Claims

B) a conductive layer above or below the dielectric layer; and

C) a temperature sensitive color indicator layer in thermal contact with the conductive layer, characterized in that 1) the conductive layer has i) sufficient heat generating capacity to affect a change in the temperature sensitive color indicator layer and ii) sufficient thermal insulating means under one of its surfaces to overcome heat sinking when the voltmeter is in contact with a battery having an electrically conductive housing and

2) the voltmeter includes means for forming an electrical switch with the electrically conductive battery housing.

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A label comprising an integral battery voltmeter having a plurality

Applicant's Disclosure

p. 7, lines 6-12; p. 14, lines 6-18; p. 17, lines 10-14, Fig. 1A, "tester circuit 10 is comprised of an electrically conductive material"

p. 2, lines 17-19; p. 10, lines 7-17; p. 11, lines 1-25; p. 12, lines 1-5; Fig. 1A, thermally sensitive material 19

p. 7, lines 20-24; p. 8, lines 4-18; p. 14, lines 1-5; p. 18, lines 3-5

p. 14, lines 11-21; p. 2, lines 15-17

p. 4, lines 4-6; p. 9, lines 3-21; Fig. 1A, switch area 20; Fig. 1C

p. 2, lines 9-10; p. 7, lines 1-24; p. 12, line 15, to p. 13, line 21

Fig. 3 illustrates elements (in order) as 44 (an insulative layer,

Copied Claims

of layers in the following order:

A) a dielectric layer;

B) a conductive layer;

C) one or more substrate
layers for the label;

D) a temperature sensitive
color indicator layer; and
characterized in that 1) the
conductive layer has i) sufficient
heat generating capacity to affect
a change in the temperature
sensitive color indicator layer and
ii) sufficient thermal insulating
means under one of its surfaces to
overcome heat sinking when the
voltmeter is in contact with a
battery having an electrically
conducting housing and 2) the
voltmeter includes means for

Applicant's Disclosure

p. 20; lines 8-15, and p.
15, lines 15-19), 45
(tester circuit), 17
(substrate layer) and 49
(thermally sensitive
material)

p. 12, lines 15-24;
p. 13, lines 3-4; p. 14,
lines 11-18; p. 15, lines
9-14, Fig. 1A, insulative
layer 5

p. 7, lines 6-12; p. 14
lines 6-18; p. 17, lines
10-14, Fig. 1A, "tester
circuit 10 is comprised
of an electrically
conductive material"

p. 12, line 15, to p. 13,
line 21

p. 2, lines 17-19; p. 10,
lines 7-17; p. 11, lines
1-25; p. 12, lines 1-5;
Fig. 1A, thermally
sensitive material 19

p. 7, lines 20-24; p. 8,
lines 4-18; p. 14, lines
1-5; p. 18, lines 3-5

p. 14, lines 11-21;
p. 2, lines 15-17

p. 4, lines 4-6; p. 9,
lines 3-21; Fig. 1A,
switch area 20; Fig. 1C

Copied Claims

forming an electrical switch with
the electrically conductive battery
housing.

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The label of claim 54 wherein
the dielectric layer also serves
as the label.

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The label of claim 55 wherein
one or more layers are included for
labeling purposes between the
conductive layer and the color
indicator layer.

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A label according to claim 57
wherein one or both ends of the
conductive layer extends beyond one
or both edges of the label.

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A label according to claim 54
or 55 wherein one or both ends of
the conductive layer are in
registration with holes in the
dielectric layer.

Applicant's Disclosure

p. 12, lines 15-23;
p. 13, lines 3-4; p. 14,
lines 11-18; p. 15, lines
9-14, Fig. 1A, insulative
layer 5

Fig. 3, p. 17, lines 19-
23; p. 12, lines 15-22;
p. 15, line 15, to p. 16,
line 25

Fig. 1A, item 15, p. 17,
lines 16-18; Fig. 2, item
19, p. 19, line 2; Figs.
3 and 4, items 40 and 41,
p. 20, lines 1-4; Fig. 5,
item 41; Fig. 6A, item
65, p. 21, lines 15-17;
p. 9, line 22 to p. 10,
line 6

Fig. 3, items 47, 42, 38
and 48, 43, 39; p. 20,
lines 5-8; p. 9, lines
11-21; Fig. 1A, items 12
and 7; p. 17, line 21 to
p. 18, line 2.

Copied Claims

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A label according to any one of claims 54 or 55 wherein a graphics layer having a scale calibrated for voltage or current is included below or alongside the color indicator layer.

-61-

A label according to claim 54 or 55 wherein the temperature insulating means is formed by placing a temperature insulating material under the conductive layer.

-62-

A battery having a label with an integral voltmeter; wherein the voltmeter comprises:

A) a dielectric layer;

p. 1; p. 2, lines 9-10;
p. 4, lines 1-4; p. 5,
lines 3-5

p. 12, lines 15-23;
p. 13, lines 3-4; p. 14,
lines 11-18; p. 15, lines
9-14, Fig. 1A, insulative
layer 5

B) a conductive layer above or below the dielectric layer; and

p. 7, lines 6-12; p. 14,
lines 6-18; p. 17, lines
10-14, Fig. 1A, "tester
circuit 10 is comprised
of an electrically
conductive material"

C) a temperature sensitive color indicator layer in thermal contact with the conductive layer,

p. 2, lines 17-19; p. 10,
lines 7-17; p. 11, lines
1-25; p. 12, lines 1-5;
Fig. 1A, thermally
sensitive material 19

Applicant's Disclosure

Fig. 1A, items 17 and 19,
p. 17, lines 19-21; Fig.
3, items 17 and 49, p.
19, line 22 to p. 20,
line 17; Fig. 4, items 17
and 56, p. 21, lines 1-5;
p. 10, line 20 to p. 11,
line 11

p. lines 11-21;
p. 2, lines 15-17

Copied Claims

characterized in that 1) the conductive layer has i) sufficient heat generating capacity to affect a change in the temperature sensitive color indicator layer and ii) sufficient thermal insulating means under one of its surfaces to overcome heat sinking when the voltmeter is in contact with a battery having an electrically conducting housing and 2) the voltmeter includes means for forming an electrical switch with the electrically conductive battery housing.

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A battery having a label with an integral voltmeter; wherein the voltmeter comprises a plurality of layers in the following order:

A) a dielectric layer;

Applicant's Disclosure

p. 7, lines 20-24; p. 8, lines 4-18; p. 14, lines 1-5; p. 18, lines 3-5

p. 14, lines 11-21;
p. 2, lines 15-17

p. 4, lines 4-6; p. 9, lines 3-21; Fig. 1A, switch area 20; Fig. 1C

p. 1; p. 2, lines 9-10;
p. 4, lines 1-4; p. 5, lines 3-5

Fig. 3 illustrates elements (in order) as 44 (an insulative layer, p. 20, lines 8-15 and p. 15, lines 15-19), 45 (tester circuit), 17 (substrate layer) and 49 (thermally sensitive material)

p. 12, lines 15-24;
p. 13, lines 3-4; p. 14, lines 11-18; p. 15, lines 9-14, Fig. 1A, insulative layer 5

Copied Claims

B) a conductive layer;

C) one or more substrate layers for the label; and

D) a temperature sensitive color indicator layer, characterized in that 1) the conductive layer has i) sufficient heat generating capacity to affect a change in the temperature sensitive color indicator layer and ii) sufficient thermal insulating means under one of its surfaces to overcome heat sinking when the voltmeter is in contact with a battery having an electrically conducting housing and 2) the voltmeter includes means for forming an electrical switch with the electrically conductive battery housing.

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The battery of claim 62 wherein the dielectric layer also serves as the label.

Applicant's Disclosure

p. 7, lines 6-12; p. 14, lines 6-18; p. 17, lines 10-14, Fig. 1A, "tester circuit 10 is comprised of an electrically conductive material"

p. 12, line 15 to p. 13, line 21

p. 2, lines 17-19; p. 10, lines 7-17; p. 11, lines 1-25; p. 12, lines 1-5; Fig. 1A, thermally sensitive material 19

p. 7, lines 20-24; p. 8, lines 4-18; p. 14, lines 1-5; p. 18, lines 3-5

p. 14, lines 11-21; p. 2, lines 15-17

p. 4, lines 4-6; p. 9, lines 3-21; Fig. 1A, switch area 20; Fig. 1C

p. 12, lines 15-23; p. 13, lines 3-4; p. 14, lines 11-18; p. 15, lines 9-14, Fig. 1A, insulative layer 5

Copied Claims

-65-

The battery of claim 63 wherein one or more layers are included for labeling purposes between the conductive layer and the color indicator layer.

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A battery according to claim 62 or 63 wherein the ends of the conductive layer are each of sufficient length to make electrical contact with each battery electrode.

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A battery according to claim 62 or 63 wherein one or both terminals of the conductive layers are in registration with different holes in the dielectric layer thereby forming membrane electrical switches for activating the voltmeter.

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A battery according to claim 62 or 63 wherein one end the conductive layer is in electrical

Applicant's Disclosure

Fig. 3, p. 17, lines 19-23; p. 12, lines 15-22; p. 15, line 15 to p. 16, line 25

Fig. 1A, item 15, p. 17, lines 16-18; Fig. 2, item 19, p. 19, line 2; Figs. 3 and 4, items 40 and 41, p. 20, lines 1-4; Fig. 5, item 41; Fig. 6A, item 65, p. 21, lines 15-17; p. 9, line 22, to p. 10, line 6

Fig. 3, items 47, 42, 38, and 48, 43, 39; p. 20, lines 5-8; p. 9, lines 11-21; Fig. 1A, items 12 and 7; p. 17, line 21 to p. 18, line 2

p. 4, lines 4-6; p. 9, lines 3-21; Fig. 1A, switch area 20; Fig. 1C

Fig. 1A, item 15, p. 17, lines 16-18; Fig. 2, item 19, p. 19, line 2; Figs. 3 and 4, items 40 and 41, p. 20, lines 1-4; Fig. 5, item 41; Fig. 6A, item

Copied Claims

contact with one electrode of
the battery and the other end has
tab that extends above or below one
of the edges of the label sufficiently
to engage the other battery electrode
thereby forming an electrical switch.

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A battery according to claim
62 or 63 wherein one of the end of
the conductive layer is in electri-
cal contact with one electrode of
the battery and the other end forms
a tab that extends above or below
one of the edges of the label
sufficiently to engage the other
battery electrode through an
accessory electrical conductor
thereby forming an electrical
switch.

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A battery according to claim
62 or 63 wherein the insulating
means is formed by inserting a
temperature insulating material
between the battery surface and
the conductive layer.

Applicant's Disclosure

65, p. 21, lines 15-17;
p. 9, line 22, to p. 10,
line 6

Fig. 1A, item 15, p. 17,
lines 16-18; Fig. 2, item
19, p. 19, line 2; Figs.
3 and 4, items 40 and 41,
p. 20, lines 1-4; Fig. 5,
item 41; Fig. 6A, item
65, p. 21, lines 15-17;
p. 9, line 22, to p. 10,
line 6

Applicant respectfully requests under 37 C.F.R. §1.607 to have an Interference declared between the present application and U.S. Patent 5,059,895 to Cataldi et al.

Applicant presents the following proposed Count as forming the basis for the interference:

-I-

A label comprising an integral battery voltmeter having:

- A) a dielectric layer;
- B) a conductive layer above or below the dielectric layer; and
- C) a temperature sensitive color indicator layer in thermal contact with the conductive layer,

characterized in that 1) the conductive layer has i) sufficient heat generating capacity to affect a change in the temperature sensitive color indicator layer and ii) sufficient thermal insulating means under one of its surfaces to overcome heat sinking when the voltmeter is in contact with a battery having an electrically conductive housing and 2) the voltmeter includes means for forming an electrical switch with the electrically conductive battery housing.

Proposed Count I corresponds exactly to the patentees' claim 11 of the '895 patent, and corresponds exactly to Applicant's claim 54 presented herein. Applicant submits that claims 1-10 and 12-29 of the '895 patent correspond substantially to the proposed Count I. Applicant further submits that claims 1-8, 10, 12, 15, 16, 18, 21, 22, 24, 25, 28-35, 46-53 and 55-70 of the present application correspond substantially to the proposed Count I. However, Applicant submits that the proposed Count I does not correspond to claims 9, 11, 13, 14, 17, 19, 20, 23, 26 and 27 of the present application.

Claims 12-18 and 20-28 of the '895 patent correspond substantially to proposed Count I because these

claims all recite the same patentable invention as recited by Count I. All of the labels comprising a battery voltmeter recited in claims 12-18 and all of the batteries having labels with voltmeters recited in claims 20-28 are the same or mere obvious variations or applications of the label recited in Count I. Moreover, claims 1-10, 19 and 29 of the '895 patent, which recite an air pocket, correspond substantially to proposed Count I, since they define the same patentable invention as Count I.

Applicant's claims 1-8, 10, 12, 15, 16, 18, 21, 22, 24, 25, 28-35, 46-53 and 55-70 correspond substantially to proposed Count I because these claims all recite various aspects of the same patentable invention as recited by Count I. Claims 55-61 all recite a label which contains an integral voltmeter. Claims 1-8, 10, 12, 15, 16, 18, 21, 22, 24, 25, 28-35, 46-53 and 62-70 all recite a battery having a label which contains a tester similar to the label having an integral voltmeter recited in Count I.

The present application was filed on January 15, 1991. Since that filing date is more than three months after the filing date of the application that matured into Patent 5,059,895, submitted herewith is evidence demonstrating that Applicant is prima facie entitled to a judgment of priority of invention relative to the '895 patent. Such evidence comprises copies of declarations under 37 C.F.R. §1.608(b) by the Applicant and corroborating witnesses and further comprises supporting documentation.

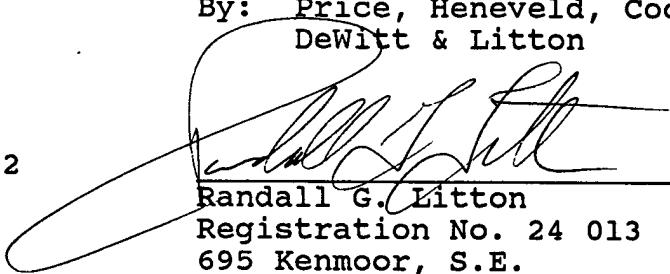
Also submitted herewith is a transmittal letter pursuant to 37 C.F.R. §1.608(b) explaining with particularity the basis upon which Applicant bases his assertion that he is prima facie entitled to the judgment of priority.

Respectfully submitted,

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October 22, 1992


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